



Vertical Riser System

Our Vertical Riser System has designed-in features that drastically reduce sewer system exposure to soil settlement issues, protecting the sewer line from top to bottom, while reducing excavation.

The integrated system is field-proven. A specially designed (CSJ) controlled settlement joint reduces sewer system exposure to soil settlement by adjusting to external forces exceeding 500 psi. The riser adapter, CSJ, and deep socket elbow all work together to help eliminate fitting breakage.

The design of our vertical riser systems may include fittings from the G-Series or H-Series.

Design Advantages

The addition of a Deep Socket Elbow allows earth compaction and settlement to occur with or without pipe pulling out of the fitting socket as the installation settles. Pipe is fully inserted into the deep socket elbow allowing a full 6 inches of movement without disengagement.

The controlled settlement joint provides up to 5½" of axial movement when encountering forces in excess of 500 lb/ft. Essentially, the Controlled Settlement Joint absorbs the forces exerted by compression allowing movement in the riser, potentially eliminating both internal stresses from pipe push through and external forces generated by compressive earth load conditions.

Vertical Riser Adapters prevent internal pipe push through or spearing, which can cause internal stress on fittings. The combination of the Vertical Riser Adapter and Controlled Settlement Joint provides an extra measure of security against spearing.

Applications

- Used to connect laterals to sewer mains.

ATTENTION: Our fittings are not to be used or tested with compressed air or gases.

A group of components which can be configured to achieve a variety of vertical sewer riser systems to protect against settlement and compaction forces.



Controlled Settlement
Joint GxG
G/H Series



Vertical Riser
Adapter SxS
G/H Series



Deep Socket
1/4 Bend GxG
H Series

Short Term Specifications

Vertical Risers for Sewers shall contain a Controlled Settlement Joint, a Vertical Riser Adapter, and a Deep Socket fitting. SDR26 pipe and other SDR26 fittings are required for directional and transitional connections. Controlled settlement joints used in a vertical riser system shall provide a minimum of 5½" of axial movement when forces of 500 pounds or greater are applied and shall be fabricated from pipe which is manufactured to ASTM D3034 specifications.

A molded SDR26 Vertical Riser Adapter shall be installed between the Controlled Settlement Joint and the bottom transition fitting. A molded, where available, SDR26 Deep Socket sewer fitting shall be used at the top of each riser assembly. SDR26 Deep Socket fittings shall provide a minimum socket depth of 6½" below the fitting gasket race. All fittings used in the vertical riser system shall be SDR26, where available, and manufactured in accordance with ASTM D3034 and F1336. Molded fitting gaskets shall comply with the ASTM F913 or F477.

Molded fitting gaskets shall be locked firmly in position with a green color-coded retention ring for easy identification and to prevent displacement. Molded fitting gaskets shall be listed by NSF in compliance with the requirements of ASTM D3212. SDR26 molded fittings shall be listed by NSF. Molded fittings shall be injection molded from virgin PVC compound having a minimum cell classification of 12454 in accordance with, and certified by NSF, to meet ASTM D1784. Vertical Riser Systems for Sewers shall be assembled per NAPCO recommended specifications.

Certification

Our injection molded SDR26 gasketed fittings are third party tested and listed by NSF and CSA to meet specifications defined in ASTM D3034, ASTM F1336 and CSA B182.2 where applicable.

